

METHODS AND APPARATUS FOR CONTROLLING THE LAPPING OF A SLIDER
BASED ON AN AMPLITUDE OF A READBACK SIGNAL PRODUCED FROM
AN EXTERNALLY APPLIED MAGNETIC FIELD

5

ABSTRACT OF THE DISCLOSURE

The lapping of a slider is controlled based on an amplitude of a readback signal which is produced from an externally applied magnetic field. A lapping plate is used to lap a slider which includes at least one magnetic head having a read sensor. During the lapping, a coil produces a magnetic field around the slider and processing circuitry monitors both a readback signal amplitude and a resistance of the read sensor. The lapping of the slider is terminated based on the monitoring both the readback signal amplitude and the resistance. Preferably, the lapping of the slider is terminated when the resistance is within a predetermined resistance range and the readback signal amplitude is above a predetermined minimum amplitude threshold or reaches its peak value. Asymmetry can also be measured in the described system, where the lapping process is terminated based on asymmetry as well as resistance and amplitude measurements.